

Map 37. Nextel SMR Licenses

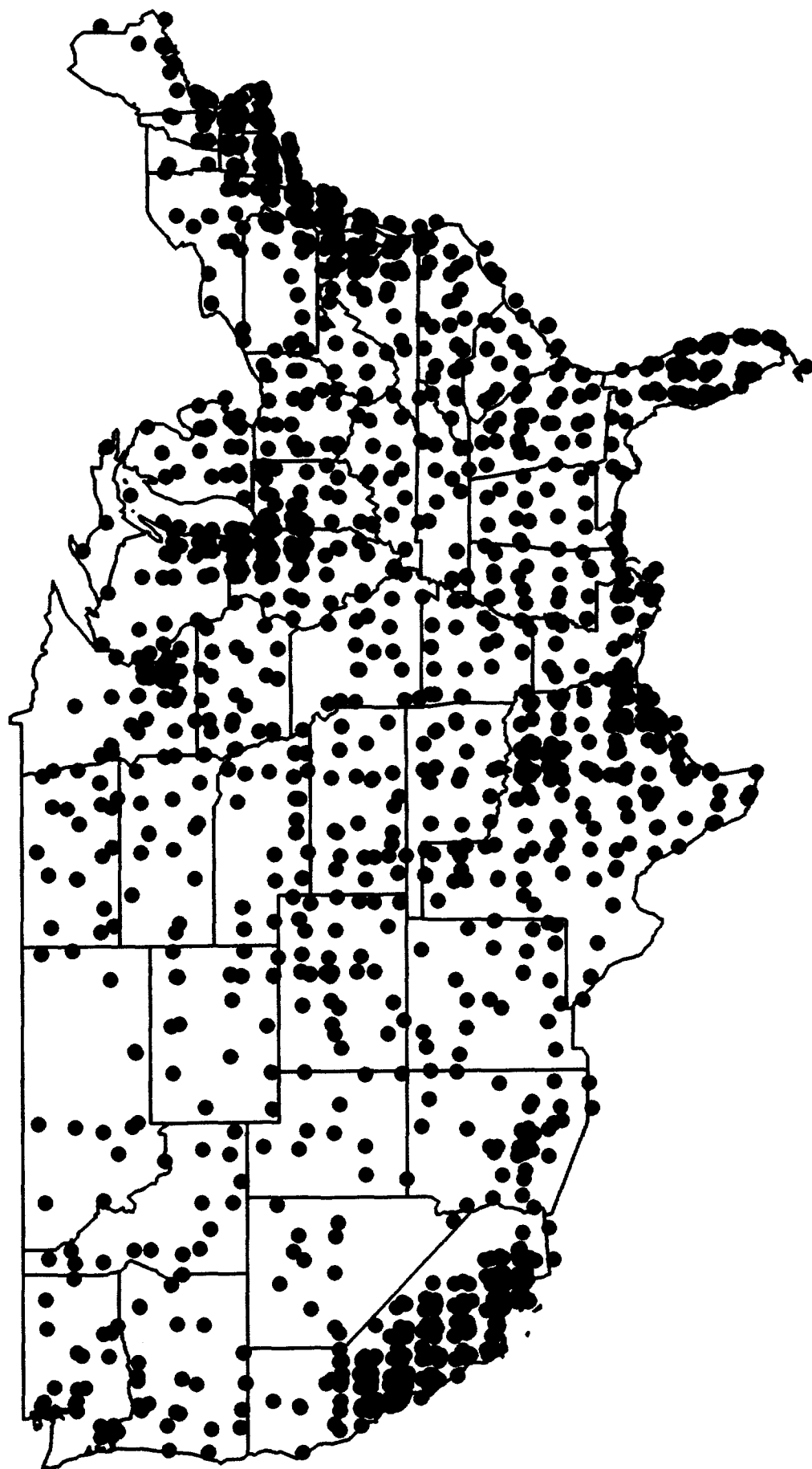


Table 1. Open Market Measures in SBC and Ameritech Regions <sup>1</sup>		
	SBC	Ameritech
Resold Lines	650,000	635,000
Unbundled Loops	60,000	94,600
Unbundled Switch Ports	343	0
Active Competitors	50+ <sup>2</sup>	50+
Interconnection and Resale Agreements	374	175
Interconnection Trunks	353,000	180,000
Collocation Arrangements	548	450
Wire Centers	173	260
Pending	443	299
Sources: <sup>1</sup> SBC and Ameritech internal information unless otherwise noted. <sup>2</sup> SBC Section 271 applications filed with various state commissions; <i>New Paradigm Resources Group and Connecticut Research, The 1998 CLEC Report: Annual Report on Local Telecommunications Competition</i> , 9th ed. (1998).		

**Table 2. Open Market Measures in St. Louis and Chicago**

	<b>St. Louis</b>	<b>Chicago</b>
Resold Lines	7,439	173,000
Unbundled Loops	0	4,674
Interconnection Trunks	7,670	69,000
Collocation Arrangements	5	137
Wire Centers	2	58
Pending	24	179
<i>Sources:</i> SBC and Ameritech internal information.		

**Table 3. SBC Local Landline Competitors by State and Method of Entry**

Resale			Unbundled Elements	Full Facilities			
ARKANSAS							
<u>14,600 lines</u> Arkansas Comm South e.spire			Fast Connections Max-Tel Communications	MCI/WorldCom Reconex	<u>1,200 unbundled loops</u> e.spire MCI/WorldCom	<u>5,900 interconnection trunks</u> ALLTEL Entergy Hyperion	e.spire MCI/WorldCom
CALIFORNIA							
<u>255,000 lines</u> Ameritech Communications AT&T/TCG Caltech Correctional Communications Easy Cellular ELI Frontier Genesis			GST & Pacific Lightwave GTE ICG LCI MCI/WorldCom Momentum Telecom PACWEST Sprint	Teligent Time Warner U.S. Long Distance USA Exchange WinStar Working Assets	<u>52,100 unbundled loops</u> AT&T/TCG FirstWorld ICG MCI/WorldCom NEXTLINK  <u>161 switch ports</u> MCI/WorldCom	<u>224,700 interconnection trunks</u> AT&T/TCG Cox ELI FirstWorld ICG	MCI/WorldCom NEXTLINK PACWEST WinStar
KANSAS							
<u>50,300 lines</u> Comm South e.spire Fast Connections			Feist Long Distance Services Max-Tel Communications MCI/WorldCom	Universal Telephone Valu-Line of Kansas	<u>360 unbundled loops</u> MCI/WorldCom	<u>3,400 interconnection trunks</u> e.spire MCI/WorldCom	
MISSOURI							
<u>22,500 lines</u> Ameritech Communications Birch Telecom Comm South Dial U.S.			e.spire Fast Connections Frontier Intermedia	Max-Tel Communications MCI/WorldCom Midwestern Tel Omniplex	<u>1,600 unbundled loops</u> e.spire MCI/WorldCom	<u>12,600 interconnection trunks</u> AT&T/TCG Digital Teleport e.spire	Frontier Intermedia MCI/WorldCom
NEVADA							
<u>1,900 lines</u> Nevada Telephone QTel			Shared Communications Tel-Link		<u>3,600 unbundled loops</u> MCI/WorldCom	<u>2,500 interconnection trunks</u> MCI/WorldCom	
OKLAHOMA							
<u>21,400 lines</u> Chickasaw Telecom Svcs Dial Tone Savers Dial Tone USA			Dobson Communications/Logix e.spire Fast Connections	Intermedia MCI/WorldCom	<u>1,300 unbundled loops</u> MCI/WorldCom	<u>9,900 interconnection trunks</u> Cox Dobson Communications/Logix	e.spire MCI/WorldCom
TEXAS							
<u>284,200 lines</u> American Metrocomm American Telco AT&T/TCG e.spire			Golden Harbor ICG KMC MCI/WorldCom	Taylor Communications Time Warner U.S. Long Distance	<u>330 unbundled loops</u> AT&T/TCG e.spire MCI/WorldCom Time Warner U.S. Long Distance  <u>180 switch ports</u> AT&T/TCG MCI/WorldCom	<u>94,400 interconnection trunks</u> Access Network Services (STS) American Metrocomm American Telco AT&T/TCG e.spire ICG Kingsgate KMC	MCI/WorldCom OpTel Taylor Communications Time Warner U.S. Long Distance Waller Creek WinStar

Sources: SBC internal information (data on resold lines, unbundled elements, interconnection trunks). *Arkansas*: (as of January 1998) Affidavit of Michael L. Montgomery, attached to SBC Arkansas 271 Application (Ark. PUC filed Feb. 24, 1998). *California*: (as of January 1998) Affidavit of George R. Elizondo, attached to SBC California 271 Application (Cal. PUC filed Mar. 31, 1998). *Kansas*: (as of January 1998) Testimony of J. Gary Smith, attached to SBC Kansas 271 Application (Kan. PUC filed Feb. 17, 1998). *Missouri*: (as of March 1998) SBC internal information. *Oklahoma*: (as of January 1998) Affidavit of George R. Elizondo, attached to SBC Oklahoma 271 Application (Ok. Corp. Comm. filed Feb. 13, 1998). *Texas*: (as of January 1998) Affidavit of Michael L. Montgomery, attached to SBC Texas 271 Application (Tex. PUC filed Mar. 2, 1998).

**Table 4. Ameritech Local Landline Competitors by State and Method of Entry**

Resale			Unbundled Elements	Full Facilities
<b>ILLINOIS</b>				
<u>274,000 lines</u>			<u>24,000 unbundled loops</u>	<u>70,000 interconnection trunks</u>
1-Point	Global Telecom	Omniplex	AT&T/TCG	AT&T/TCG
AMI	LCI	One Stop	McLeod	Coast to Coast
AT&T/TCG	LJSS General	Sprint	ICG	Focal Communications
Caltech International	MCI/WorldCom	United Communications	MCI/WorldCom	Frontier
Cimco Communications	McLeod	Ushman	NEXTLINK	Intermedia
Clarity	Midcomm	USN Communications		
Frontier	Midwestern	Wedgewood		
Globalcom	Millenium Group	WinStar		
<b>INDIANA</b>				
<u>14,000 lines</u>				<u>12,000 interconnection trunks</u>
Annox	Globalcom	MCI/WorldCom		AT&T/TCG
Cimco Communications	LCI	USN Communications		Focal Communications
Frontier	McLeod	US Xchange		Frontier
				Intermedia
				MCI/WorldCom
<b>MICHIGAN</b>				
<u>225,000 lines</u>			<u>54,000 unbundled loops</u>	<u>44,000 interconnection trunks</u>
AT&T/TCG	Frontier	Millenium Group	AT&T/TCG	AT&T/TCG
CMC	LCI	Phone Michigan	Climax	Climax
Coast to Coast	MCI/WorldCom	USN Communications	Dakota Services	Coast to Coast
			MCI/WorldCom	
			NEXTLINK	
			Phone Michigan	
			TDS Metro	
<b>OHIO</b>				
<u>95,000 lines</u>			<u>16,000 unbundled loops</u>	<u>26,000 interconnection trunks</u>
AT&T/TCG	Easton	MCI/WorldCom	ICG	AT&T/TCG
Cellular One	Frontier	Millenium Group	MCI/WorldCom	Buckeye Telesystem
Communications Options, Inc.	Global Telecom	USN Communications	NEXTLINK	Frontier
Cons. Buying Group	ICG			ICG
Digicom	LCI			
<b>WISCONSIN</b>				
<u>38,000 lines</u>			<u>900 unbundled loops</u>	<u>9,000 interconnection trunks</u>
Cimco Communications	MCI/WorldCom	Schneider Communications	Dakota Services	AT&T/TCG
Frontier	McLeod	TDS Metro	MCI/WorldCom	KMC
Globalcom	Midplains Communications	USN Communications	TDS Metro	MCI/WorldCom
Global Telecom	Millenium Group	US Xchange	US Xchange	
KMC	Network Recovery	WinStar		

Source: Ameritech internal information.

**Table 5. Local Resellers in St. Louis**  
(7,439 resold lines)

Ameritech Communications
Birch Telecom
Fast Connections
Frontier
Intermedia
Max-Tel Communications
MCI/WorldCom
Midwestern Tel
Omniplex
<i>Source: SBC internal information.</i>

**Table 6. Local Resellers in Chicago**  
(173,000 resold lines)

I-Point
AT&T/TCG
Caltech Communications
Cimco Communications
Frontier
Globalcom
Global Telecom
LCI
Millenium Group
MCI/WorldCom
Omniplex
USN Communications
WinStar
<i>Source: Ameritech internal information.</i>

**Table 7. Competitive Landline Switches in SBC's Region<sup>1</sup>**

Allegiance Telecom	4	IWL Connect	2
ALLTEL	2	Justice Technology	1
AT&T/TCG	90	Kin Network	3
Austin Bestline	1	KMC	2
Birch Telecom	1	Level 3	5
Connect Communications	1	Linkatel	1
CoServ	5	Mark Twain Communications	3
Cox	3	MCI/WorldCom	82
Cypress	1	MediaOne	9
Digital Teleport	1	MGC Communications	25
Dobson	6	Multimedia Hyperion	1
Dunn & Associates	1	Multitechnology Services	3
ELI	1	NEXTLINK	10
Entergy Hyperion	1	North County Communications	1
e.spire	14	Nortex	1
Fiber Wave Telecom	2	OpTel	3
Fibrcom	1	PACWEST	30
FirstWorld	29	Phoenix Fiberlink	1
Focal Communications	1	Pioneer Long Distance	5
Frontier	2	S&T Communications	1
Geotek	4	Taylor Communications	4
Golden Harbor	27	Teligent	10
Great West Services	2	Time Warner	4
GST	16	Total Communications	2
GTE (as a CLEC)	13	U.S. Long Distance	1
Hyperion Telecom	1	W.T. Services	1
ICG	36	WinStar	18
Intermedia	6	XIT Tel & Tech	2
<b>Total: 56 Companies</b>			<b>503</b>

<sup>1</sup>The LERG is based on information that is provided to Bellcore by incumbent and competitive local carriers. LERG switch counts do not always agree with counts from other sources, including public statements by the carriers themselves. Some of these discrepancies are due to the blurring of definitional lines between switching entities and rate centers. The bright line that once distinguished central office switches from other switching equipment has been fading as a new generation of remote switches and remote digital terminals (RDTs) have emerged with limited switching capabilities. Data shown here include all switches designated as "local" and as "CLEC" or "CAP" in the LERG.

Source: Bellcore LERG (July 1998).

**Table 8.**  
**Competitive Landline Switches in Ameritech's Region<sup>1</sup>**

21st Century	1
Allegiance Telecom	1
AT&T/TCG	68
Buckeye Telesystem	1
Coast to Coast Communications	3
Focal Communications	1
Frontier	2
ICG	5
Intermedia	4
KMC	1
Level 3	2
MCI/WorldCom	33
McLeod	7
MGC Communications	1
NEXTLINK	7
Phone Michigan	2
TDS Metrocom	2
Teligent	2
Time Warner	4
US Xchange	6
WinStar	4
<b>Total: 21 Companies</b>	<b>157</b>

<sup>1</sup>The LERG is based on information that is provided to Bellcore by incumbent and competitive local carriers. LERG switch counts do not always agree with counts from other sources, including public statements by the carriers themselves. Some of these discrepancies are due to the blurring of definitional lines between switching entities and rate centers. The bright line that once distinguished central office switches from other switching equipment has been fading as a new generation of remote switches and remote digital terminals (RDTs) have emerged with limited switching capabilities. Ameritech internal data, for example, indicate 124 competitive switches in its region. Data shown here include all switches designated as "local" and as "CLEC" or "CAP" in the LERG.

Sources: Bellcore LERG (July 1998); Ameritech internal data.



**Table 9.**  
**Competitive Landline Switches in the St. Louis LATA<sup>1</sup>**

AT&T/TCG	7
Digital Teleport	1
Intermedia	3
Mark Twain Communications	2
MCI/WorldCom	3
<b>Total</b>	<b>16</b>

<sup>1</sup>Data include all switches designated as "local" and as "CLEC" or "CAP" in the LERG.  
Source: Bellcore LERG (July 1998).

**Table 10.**  
**Competitive Landline Switches in the Chicago LATA<sup>1</sup>**

21st Century	1
Allegiance Telecom	1
AT&T/TCG	20
Focal Communications	1
Frontier	1
Intermedia	2
Level 3	1
McLeod	1
MCI/WorldCom	10
MGC Communications	1
NEXTLINK	2
Teligent	1
WinStar	1
<b>Total</b>	<b>43</b>

<sup>1</sup>LERG data include all switches designated as "local" and as "CLEC" or "CAP" in the database. Ameritech internal data indicate 37 competitive switches in the Chicago LATA.

Sources: Bellcore LERG (July 1998); Ameritech internal data.

**Table 11. Selected Competitive Facilities in SBC's Region**

CLEC	Location	Route Miles	Buildings On-Net	Switches (statewide)
<b>ARKANSAS</b>				
ALLTEL	Little Rock	95		2
MCI/WorldCom	Little Rock	21	28	1
Entergy Hyperion	Little Rock	114		1
e.spire	Little Rock	6	14	2
<b>CALIFORNIA</b>				
Allegiance Telecom	PLANNED: Los Angeles (1998), San Francisco (1998), Orange County (1999)			1
AT&T/TCG/TCI	San Diego, Anaheim, Los Angeles, San Jose, Oakland, San Francisco, Sacramento	1,077	94 (TCG)	55
Cox	San Diego, Orange County, Santa Barbara, Bakersfield	915		2
ELI	Sacramento, Los Angeles	200		1
FirstWorld	Anaheim	110		29
Focal Communications	San Jose, Oakland, San Francisco			1
GST	Riverside, Los Angeles, San Luis Obispo, Fresno, San Francisco, Walnut Creek			15
GTE (as a CLEC)	Los Angeles			3
ICG	San Diego, Anaheim, Los Angeles, San Jose, San Francisco, Sacramento	1,538		36
Level 3	San Francisco			3
Linkatel	Anaheim			1
MCI/WorldCom	San Diego, Los Angeles, Orange County, Bakersfield, Fresno, San Jose, Santa Clara, Sunnyvale, Milpitas, Palo Alto, Oakland, San Francisco, Stockton, Sacramento	773		51
MediaOne	PLANNED: Anaheim, Fresno, Long Beach, Los Angeles, Santa Monica			12
MGC Communications	Los Angeles, Ontario			
	PLANNED: San Diego, Palm Springs, Orange County, San Francisco			25
NEXTLINK	South San Francisco Bay	50		13
	Los Angeles, Orange County, Santa Ana	248	6	
PACWEST				30
Time Warner	San Diego			2
WinStar	Los Angeles, San Diego, San Francisco			12
<b>KANSAS</b>				
AT&T/TCG	Kansas City	611	205	1
Birch Telecom	PLANNED: Dodge City, Emporia, Garden City, Hutchinson, Kansas City, Lawrence, Manhattan, Salina, Topeka, Wichita			
e.spire	Kansas City, Johnson County	33		3
MCI/WorldCom	Kansas City	42		2
Multimedia Hyperion	Wichita	130		1
<b>MISSOURI</b>				
AT&T/TCG	St. Louis	203	72	4
	Kansas City			
Birch Telecom	PLANNED: St. Joseph		5	1
	PLANNED: St. Louis, Kansas City			
Digital Teleport	Columbia, Fulton, Jefferson City, St. Louis	470	76	1
	Mexico	5		
e.spire	Kansas City	5		2
Intermedia	Chesterfield, Manchester, St. Louis			3
MCI/WorldCom	Kansas City, Springfield	68		5
	St. Louis		38	

**Table 11. Selected Competitive Facilities in SBC's Region**

CLEC	Location	Route Miles	Buildings On-Net	Switches (statewide)
WinStar	PLANNED: St. Louis			1
<b>NEVADA</b>				
MCI/WorldCom	Reno	32	33	1
<b>OKLAHOMA</b>				
Cox	Oklahoma City	120	38	1
Dobson Communications	Oklahoma City	400		4
e.spire	Tulsa	2		1
MCI/WorldCom	Oklahoma City, Tulsa	265	122	3
<b>TEXAS</b>				
Allegiance Telecom	PLANNED: Dallas (1998), Ft. Worth (1998)			3
American Telco	Houston			
AT&T/TCG	Austin, Dallas/Ft. Worth, Houston	708	230	13
Cypress	Houston			1
e.spire	Austin, Corpus Christi, El Paso, Dallas/Ft. Worth	207	55	8
Fibrcom	San Antonio			1
Frontier	Dallas			1
Geotek	San Antonio			4
GST	PLANNED: Dallas, Houston, El Paso			1
Golden Harbor				27
ICG	Austin, Corpus Christi, Dallas, San Antonio	260		7
Intermedia	Dallas, Houston			3
Kingsgate				
KMC	Corpus Christi	34	5	1
Level 3	Dallas, Houston			2
MCI/WorldCom	Austin, Corpus Christi, Dallas, Ft. Worth, Houston, San Antonio, Waco	693	186 (MFS) 125 (Brooks)	19
	El Paso			
OpTel	Houston	400	35	5
Taylor Communications	Austin, Dallas, Houston, San Antonio			4
Teligent	PLANNED: Austin, Dallas/Ft. Worth, El Paso, Houston, San Antonio			5
Time Warner	Austin, Houston, San Antonio	700	74	2
U.S. Long Distance	Houston, San Antonio, Waco			1
WinStar	Dallas/Ft. Worth			5
	PLANNED: Houston (1998)			

*Sources:* All switch figures are taken from the Bellcore LERG (July 1998) database. The LERG is based on information that is provided to Bellcore by incumbent and competitive local carriers. LERG switch counts do not always agree with counts from other sources, including public statements by the carriers themselves. Some of these discrepancies are due to the blurring of definitional lines between switching entities and rate centers. The bright line that once distinguished central office switches from other switching equipment has been fading as a new generation of remote switches and remote digital terminals (RDTs) have emerged with limited switching capabilities. Data shown here include all switches designated as "local" and as "CLEC" or "CAP" in the database. *Arkansas* - New Paradigm Resources Group and Connecticut Research, *The 1998 CLEC Report: Annual Report on Local Telecommunications Competition*, 9th ed. (1998) ("Connecticut Research") (e.spire); Affidavit of Michael L. Montgomery, attached to SBC Arkansas 271 Application (Ark. PUC filed Feb. 24, 1998) (ALLTEL, Entergy Hyperion, MCI/WorldCom). *California* - Connecticut Research (Allegiance, Focal Comm., GST, ICG, Level 3, MediaOne, MGC Comm., NEXTLINK); Affidavit of George R. Elizondo, attached to SBC California 271 Application, (Cal. PUC filed Mar. 31, 1998) (AT&T/TCG/TCL, Cox, ELI, FirstWorld, ICG, MCI/WorldCom, NEXTLINK, PACWEST, Time Warner, WinStar). *Kansas* - Connecticut Research (AT&T/TCG, Birch); SBC Kansas 271 Application (Kan. PUC filed Feb. 17, 1998) (MCI/WorldCom); Testimony of J. Gary Smith, attached to SBC Kansas 271 Application (Kan. Corp. Comm. filed Feb. 17, 1998) (AT&T/TCG, e.spire, MHT). *Missouri* - Connecticut Research. *Nevada* - Connecticut Research. *Oklahoma* - Affidavit of George R. Elizondo, attached to SBC Oklahoma 271 Application. *Texas* - Connecticut Research (Allegiance, KMC, WinStar); Affidavit of Michael L. Montgomery, attached to SBC Texas 271 Application (Tex. PUC filed Mar. 2, 1998) (American Telco, AT&T/TCG, e.spire, ICG, Golden Harbor, Kingsgate, KMC, MCI/WorldCom, OpTel, Taylor Comm., Time Warner, U.S. Long Distance, WinStar).

**Table 12. Selected Competitive Facilities in Ameritech's Region**

CLEC	Location	Route Miles	Buildings On-Net	Switches (statewide)
<b>ILLINOIS</b>				
21st Century	UNDER CONSTRUCTION: Chicago (1998)			1
Allegiance Telecom	PLANNED: Chicago (1998)			1
AT&T/TCG	Chicago	750+	200	29
e.spire	PLANNED: Chicago			
Focal Communications	Chicago			1
Frontier	Chicago			1
Intermedia	Chicago			2
Level 3	Chicago			1
MCI/WorldCom	Chicago	230	35-40 (MCI) 250 (MFS)	10
McLeod <sup>1</sup>	Mattoon (including Champaign, Decatur, Peoria, and Springfield markets) PLANNED: Rockford	1,200		1
MFN	PLANNED: Chicago	50		
MGC Communications	PLANNED: Chicago			1
NEXTLINK	Chicago	40	25+	2
QST Communications	Peoria PLANNED: Bartonville, Pekin, Springfield (1998)	104		
Teligent	PLANNED: Chicago			1
WinStar	Chicago		30 (100 by YE98)	1
<b>INDIANA</b>				
AT&T/TCG	Indianapolis (including Fishers, Carmel, and Greenwood) Gary	199	100-200	3
Intermedia	Indianapolis			1
McLeod	PLANNED: Indianapolis			2
MCI/WorldCom	Indianapolis	160	35	4
Teligent	PLANNED: Indianapolis			
Time Warner	Indianapolis	300	150	1
US Xchange	PLANNED: Southbend, Elkhart, Ft. Wayne, Bloomington, Evansville, Lafayette, Kokomo, Marion (1998)	230	43	
WinStar	PLANNED (5 channel-capacity - 500 MHz)			
<b>MICHIGAN</b>				
AT&T/TCG	Detroit	300	50	12
BRE Communications dba Phone Michigan	Flint PLANNED: Bay City, Midland, Saginaw PLANNED: Fenton, Flushing, Grand Blanc, Holly, Lapier, Marine City, New Baltimore, Port Huron, and St. Clair	228 78	80	2
Climax	Battle Creek/Kalamazoo	10		
Coast to Coast	PLANNED: Ann Arbor, Detroit, Flint, Grand Rapids, Lansing, Livonia, Oakland County, Port Huron, Troy			1
Level 3	Detroit			1
MCI/WorldCom	Detroit Grand Rapids Lansing	180-210 300 55	16 (MCI) 115-125 (MFS) 400 55	12
Teligent	PLANNED: Detroit- 400 MHz license			

**Table 12. Selected Competitive Facilities in Ameritech's Region**

CLEC	Location	Route Miles	Buildings On-Net	Switches (statewide)
WinStar	PLANNED: Detroit (1998-1999) (600 MHz bandwidth coverage includes Battle Creek, Grand Rapids, Lansing, and Saginaw)			1
<b>OHIO</b>				
AT&T/TCG	Cleveland	146	35	17
	PLANNED: Columbus			
Cablevision Lightpath	PLANNED: Cleveland (1998)			
Frontier	Cleveland			1
ICG	Columbus, Dayton, Ohio intercity facilities	431		5
	Cleveland/Akron	170-220	52	
MCI/WorldCom	Cleveland, Toledo	105	35 (MCI) 30 (MFS) 5 (Brooks)	6
NEXTLINK	Cleveland, Akron, Columbus	400	13+	6
Time Warner	Columbus	500	90+	2
WinStar	Columbus			1
	PLANNED: Cleveland (1998-1999)			
<b>WISCONSIN</b>				
AT&T/TCG	Milwaukee	250	40	5
KMC	Madison/Middletown	32	20	1
MCI/WorldCom	Milwaukee	20+	7+	1
McLeod	PLANNED: Madison, Green Bay, Milwaukee			
TDS Metro	Madison	60		2
	PLANNED: Appleton, Green Bay (1998)			
Teligent	PLANNED: Milwaukee			1
Time Warner	Milwaukee	250-350	120	1
US Xchange	Appleton, Neenah, Osh Kosh	26	6	5
	PLANNED: De Pere, Green Bay, Madison, Milwaukee	161	17	
WinStar	Milwaukee			1
<p><sup>1</sup>Includes interexchange facilities.</p> <p>Sources: All switch figures are taken from the Bellcore LERG (July 1998) database. The LERG is based on information that is provided to Bellcore by incumbent and competitive local carriers. LERG switch counts do not always agree with counts from other sources, including public statements by the carriers themselves. Some of these discrepancies are due to the blurring of definitional lines between switching entities and rate centers. The bright line that once distinguished central office switches from other switching equipment has been fading as a new generation of remote switches and remote digital terminals (RDTs) have emerged with limited switching capabilities. Data shown here include all switches designated as "local" and as "CLEC" or "CAP" in the database. <i>Illinois</i> - New Paradigm Resources Group and Connecticut Research, <i>The 1998 CLEC Report: Annual Report on Local Telecommunications Competition</i>, 9th ed. (1998) ("Connecticut Research") (21st Century, Allegiance, e.spire, Focal Comm., Intermedia, McLeod, MFN, MGC Comm., QST, Teligent); Initial Brief of Ameritech Illinois at fn. 11, Investigation Concerning Illinois Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996, No. 96-0404 (Ill. Commerce Commission filed Feb. 5, 1998) (MFS); S. Levine, <i>TCI Turns on Telephony in Chicago</i>, <i>Telephony</i>, Jan. 20, 1997 (TCI); Quality Strategies, <i>Ameritech CAP/CLEC Network Descriptions, First Quarter 1998</i>, Apr. 15, 1998 ("Quality Strategies") (AT&amp;T/TCG, MCI/WorldCom, McLeod, NEXTLINK, WinStar); Teligent Press Release, <i>Teligent Reports First Quarter Financial Results</i>, May 12, 1998 (Teligent). <i>Indiana</i> - Connecticut Research (AT&amp;T/TCG, Intermedia, McLeod, Teligent, US Xchange, WinStar); Quality Strategies (AT&amp;T/TCG, MCI/WorldCom, Time Warner); Teligent Press Release, <i>Teligent Reports First Quarter Financial Results</i>, May 12, 1998 (Teligent). <i>Michigan</i> - Connecticut Research (BRE, Climax, Coast to Coast, MCI/WorldCom, Teligent, WinStar); Quality Strategies (AT&amp;T/TCG, MCI/WorldCom). <i>Ohio</i> - Connecticut Research (AT&amp;T/TCG, Cablevision Lightpath, ICG, Intermedia, WinStar); Quality Strategies (AT&amp;T/TCG, ICG, MCI/WorldCom, NEXTLINK, Time Warner). <i>Wisconsin</i> - Connecticut Research (KMC, McLeod, TDS, US Xchange); Quality Strategies (AT&amp;T/TCG, KMC, MCI/WorldCom, McLeod, Time Warner); Teligent Press Release, <i>Teligent Reports First Quarter Financial Results</i>, May 12, 1998 (Teligent).</p>				

**Table 13. Cable Modem Operators in SBC and Ameritech Regions**

State	Cable Operator	Area
Arkansas	Conway Corp.	Conway
California	Avenue Cable TV	Ventura
	Charter Communications	Riverside, Pasadena
	Coast Cablevision	San Mateo
	Cox	Orange County, San Diego
	Daniels Cablevision	Encinitas
	GTE	Ventura
	Horizon Cable	Point Reyes
	MediaOne	Los Angeles
	Palo Alto Cable Co-Op	Palo Alto
	Ponderosa Cable	Danville
	San Bruno Municipal Cable	San Bruno
	TCI	Fremont, Castro Valley, Sunnyvale
	Time Warner	San Diego
Illinois	21st Century	Chicago
	MediaOne	Chicago
	TCI	Arlington Heights
	Wedgewood	Chicago
Indiana	Insight Communications (test)	Indianapolis
Michigan	Bresnan Communications	Iron Mountain, Escanaba, Houghton
	Comcast	Detroit
	Horizon Cable	Central Michigan
	MediaOne	Ann Arbor, Suburban Detroit
	TCI	East Lansing
Missouri	Charter Communications (test)	St. Louis
Ohio	Adelphia	Western Reserve, Macedonia
	Coaxial Communications	Columbus
	Fanch Communications	Bowling Green
	Time Warner	Akron, Canton, Columbus, Youngstown
Oklahoma	CommuniComm Services	Durant
Texas	Cablevision of Lake Travis	Lake Travis
	TCA Cable (test)	Amarillo
	Time Warner	El Paso
Wisconsin	Marcus Cable (test)	Eau Claire
<i>Sources: Cable Datacom News, Commercial Cable Modem Launches in North America, at <a href="http://cabledatacomnews.com/cm1c7.htm">http://cabledatacomnews.com/cm1c7.htm</a> (July 1, 1998); Cable Datacom News, Select Cable Modem Market Trials in North America, at <a href="http://cabledatacomnews.com/cm1c8.htm">http://cabledatacomnews.com/cm1c8.htm</a> (June 20, 1998); Ameritech internal data.</i>		

**Table 14. Resources of Major Global Players**

Company	Revenues <sup>1</sup> (in \$ billions)	Access Lines <sup>2</sup> (in millions)
SBC/Ameritech	43	56
AT&T's WorldPartners	141	226 <sup>3</sup>
Sprint's Global One	89	89
MCI/WorldCom	27	28
Unisource <sup>4</sup>	26	18
NTT (Japan)	71	61
Deutsche Telekom	41	44
France Telecom	26	34
British Telecom	26	28
Telecom Italia	25	25

<sup>1</sup>Revenues for alliances (WorldPartners - 1996, Global One - 1995, Unisource - 1995) are totals of parent companies.

<sup>2</sup>Figures for MCI/WorldCom are based on presubscribed long-distance access lines. Figures for global alliance access lines include local access lines or, where applicable, presubscribed access lines of alliance partners. <sup>3</sup>Figures for KDD and CAT are not available. <sup>4</sup>Unisource is also part of the WorldPartners alliance.

Sources: *WorldPartners*: 1996 annual report (AT&T); 1997 annual reports (Indosat, PLDT, Telecom New Zealand, Telkom South Africa); 1998 annual reports (Hong Kong Telecom, Telecom New Zealand); G. Staple, ed., *TeleGeography 1997-98* at 94 (1997) (KDD, Singapore Telecom, Telstra, Hong Kong Telecom, Bezeq International, Telekom Malaysia, Telebras, VSNL); S. Pique, et al., Bear, Stearns & Co., Inc., Rpt. No. 2648757, Latin American Conglomerates - Industry Report, at \*64 (Mar. 30, 1998) (Alestra, based on estimated 1996 revenue); Dun & Bradstreet, Business Information Report, Korea Telecommunication Authority, DUNS No. 68-777-8480 (July 20, 1998) (Korea Telecom); Dun & Bradstreet, Business Report, Communications Authority of Thailand, DUNS No. 65-974-7836 (Sept. 1997) (CAT); *Taiwan Regulations: Cap on Foreign Equity in Telecoms to Rise*, EIU ViewWire, Aug. 6, 1997 (CHT-I); FCC, *Long Distance Market Shares, First Quarter 1998*, at Table 2.1 (June 1998) ("Long Distance Market Shares") (AT&T, Sprint); M. Miller, Socgen-Crosby Securities Pte., Ltd., Rpt. No. 2669067, Singapore Telecom - Company Report, at \*6 (June 1, 1998) (Singapore Telecom); OECD, *Communications Outlook 1997*, Vol. 1, at Table 1.1 (1997) (PTT Netherlands, Telia, Swiss PTT, Telstra); Korea Telecom, *Strengths*, at [http://www.kt.co.kr/english/company/majorwork\\_right1.htm](http://www.kt.co.kr/english/company/majorwork_right1.htm) (Korea Telecom); Barclays de Zoete Wedd Securities, Rpt. No. 1776127, Bezeq Telecom - Company Report (Aug. 8, 1996) (Bezeq); J. Cheshier, Schroder Securities (Asia), Ltd., Rpt. No. 2616348, Taiwanese Telecoms' Murky Deregulation - Industry Report, at \*5 (Nov. 1, 1997) (CHT lines); M. Shuper, et al., Morgan Stanley, Dean Witter, Rpt. No. 2573288, Telekom Malaysia - Company Report, at \*2 (Aug. 6, 1997) (Telecom Malaysia); L. Zurlo, et al., Credit Suisse First Boston Corp., Rpt. No. 3313101, Telecom/Updated Latin American Models/Valuations - Industry Report, at \*6 (Dec. 9, 1997) (Telebras); P. Mubayi, Lehman Brothers Asia, Rpt. No. 1784726, Videsh Sanchar Nigam Ltd. - Company Report, at \*11 (Aug. 30, 1996) (VSNL). *Global One, Unisource*: International Telecommunications Union, *World Telecommunication Development Report 1996/97* at 34 (1997); *Long Distance Market Shares at Table 2.1 (Sprint)*. *MCI/WorldCom*: 1997 annual reports. *NTT*: 1997 annual report. *Deutsche Telekom*: 1996 annual report. *France Telecom*: France Telecom Press Release, 1997 Results Confirm Growth - France Telecom Financial Results in Line with Forecasts, Mar. 18, 1998. *British Telecom*: 1998 annual report. *Telecom Italia*: J. Downie, et al., ABN, Amro, Hoare, Govett, Rpt. 2677955, Telecom Italia - Company Report, at \*1 (Apr. 22, 1998).

**Table 13. Cable Modem Operators in SBC and Ameritech Regions**

State	Cable Operator	Area
Arkansas	Conway Corp.	Conway
California	Avenue Cable TV	Ventura
	Charter Communications	Riverside, Pasadena
	Coast Cablevision	San Mateo
	Cox	Orange County, San Diego
	Daniels Cablevision	Encinitas
	GTE	Ventura
	Horizon Cable	Point Reyes
	MediaOne	Los Angeles
	Palo Alto Cable Co-Op	Palo Alto
	Ponderosa Cable	Danville
	San Bruno Municipal Cable	San Bruno
	TCI	Fremont, Castro Valley, Sunnyvale
	Time Warner	San Diego
Illinois	21st Century	Chicago
	MediaOne	Chicago
	TCI	Arlington Heights
	Wedgewood	Chicago
Indiana	Insight Communications (test)	Indianapolis
Michigan	Bresnan Communications	Iron Mountain, Escanaba, Houghton
	Comcast	Detroit
	Horizon Cable	Central Michigan
	MediaOne	Ann Arbor, Suburban Detroit
	TCI	East Lansing
Missouri	Charter Communications (test)	St. Louis
Ohio	Adelphia	Western Reserve, Macedonia
	Coaxial Communications	Columbus
	Fanch Communications	Bowling Green
	Time Warner	Akron, Canton, Columbus, Youngstown
Oklahoma	CommuniComm Services	Durant
Texas	Cablevision of Lake Travis	Lake Travis
	TCA Cable (test)	Amarillo
	Time Warner	El Paso
Wisconsin	Marcus Cable (test)	Eau Claire
<i>Sources: Cable Datacom News, Commercial Cable Modem Launches in North America, at <a href="http://cabledatacomnews.com/cm1c7.htm">http://cabledatacomnews.com/cm1c7.htm</a> (July 1, 1998); Cable Datacom News, Select Cable Modem Market Trials in North America, at <a href="http://cabledatacomnews.com/cm1c8.htm">http://cabledatacomnews.com/cm1c8.htm</a> (June 20, 1998); Ameritech internal data.</i>		



**Table 15. Selected International Investments**

<b>Country</b>	<b>SBC Investment (services provided)</b>	<b>Ameritech Investment (services provided)</b>
<b>Europe/Middle East</b>		
Belgium		Belgacom (17.5 percent) <i>local, long-distance, wireless, directory, security services</i>
Denmark		TeleDanmark (41.6 percent) <i>local, long-distance, wireless, cable, directory, security services</i>
France	Cegetel (15 percent) <i>local, long-distance, wireless</i> Societe Francaise de Radiotelephone (10 percent) <i>wireless</i>	
Germany		WLW (100 percent) <i>business-to-business advertising</i>
Hungary		MATAV (29.8 percent) <i>local, long-distance, wireless, cable, directory</i>
Israel	AUREC Group (50 percent) AMDOCS (23.4 percent) long distance consortium (22 percent) <i>cable, publishing, billing and customer service software, long distance</i>	
Norway		NetCom (19.7 percent) <i>wireless</i>
Switzerland	diAX (40 percent) <i>local, long-distance</i>	
U.K.	TeleWest (15 percent) <i>cable</i>	
<b>Central/South America</b>		
Chile	VTR (44.1 percent) <i>local, long-distance, wireless, cable</i>	
Mexico	Teléfonos de México (9.6 percent) <i>local, long-distance, wireless</i>	
<b>Asia/Pacific</b>		
South Korea	Shinsegi Mobile (7.8 percent) <i>wireless</i>	
Taiwan	TransAsia Telecommunications (20 percent) <i>wireless</i>	
<b>Africa</b>		
South Africa	MTN of South Africa <i>wireless</i> Telkom SA (18 percent) <i>local, long-distance, wireless</i>	
Sources: SBC Investor Briefing, May 11 1998, at 5; SBC 1997 Annual Report; SBC, <i>About SBC: International Operations</i> , at <a href="http://www.sbc.com/About/international.html">http://www.sbc.com/About/international.html</a> ; Ameritech internal information.		

**Table 16. International Investments and Alliances**

Company	Markets			
	Europe/Middle East	Central/South America	Asia/Pacific	Other
<b>SBC/Ameritech</b>	<ul style="list-style-type: none"> <li>Belgium (Belgacom)</li> <li>Denmark (TeleDanmark)</li> <li>France* (CEGETEL, Societe Francaise de Radiotelephone)</li> <li>Germany* (WLW)</li> <li>Hungary (MATAV)</li> <li>Israel (incl. AUREC, AMDOCS)</li> <li>Italy*</li> <li>Norway (NetCom)</li> <li>Spain*</li> <li>Switzerland (diAX)</li> <li>U.K.* (TeleWest)</li> </ul>	<ul style="list-style-type: none"> <li>Brazil*</li> <li>Chile (VTR S.A.)</li> <li>Mexico (Teléfonos de México)</li> </ul>	<ul style="list-style-type: none"> <li>Australia*</li> <li>Hong Kong*</li> <li>Japan*</li> <li>Singapore*</li> <li>South Korea (Shinsegi Mobile)</li> <li>Taiwan (TransAsia Telecom)</li> </ul>	<ul style="list-style-type: none"> <li>South Africa (MTN o South Africa, Telkom SA)</li> </ul>
<b>AT&amp;T's World Partners</b>	<ul style="list-style-type: none"> <li>Israel (Bezeq International)</li> <li>Netherlands (PTT Telecom)</li> <li>Sweden (Telia)</li> <li>Switzerland (Swiss PTT)</li> </ul>	<ul style="list-style-type: none"> <li>Brazil (Telebras)</li> <li>Mexico (Alestra)</li> </ul>	<ul style="list-style-type: none"> <li>Australia (Telstra)</li> <li>Hong Kong (Hong Kong Telecom)</li> <li>India (VSNL)</li> <li>Indonesia (Indosat)</li> <li>Japan (KDD)</li> <li>Malaysia (Telekom Malaysia)</li> <li>New Zealand (TCNZ)</li> <li>Philippines (PLDT)</li> <li>Singapore (Singapore Telecom)</li> <li>South Korea (Korea Telecom)</li> <li>Taiwan (CHT-I)</li> <li>Thailand (CAT)</li> </ul>	<ul style="list-style-type: none"> <li>Canada (AT&amp;T Canada)</li> <li>South Africa (Telkom SA)</li> </ul>
<b>WorldCom/MCI</b>	<ul style="list-style-type: none"> <li>Belgium</li> <li>France</li> <li>Germany</li> <li>Ireland</li> <li>Italy</li> <li>Netherlands</li> <li>Portugal (Telefónica)</li> <li>Spain (Telefónica)</li> <li>Sweden</li> <li>Switzerland</li> <li>U.K.</li> </ul>	<ul style="list-style-type: none"> <li>Argentina (Telefónica)</li> <li>Belize (Belize Telecom)</li> <li>Brazil (Telefónica)</li> <li>Chile (Telefónica)</li> <li>Mexico (Avantel)</li> <li>Peru (Telefónica)</li> </ul>	<ul style="list-style-type: none"> <li>Australia</li> <li>Hong Kong</li> <li>Japan</li> <li>New Zealand (CLEAR)</li> <li>Singapore</li> <li>South Korea</li> </ul>	<ul style="list-style-type: none"> <li>Canada (Stentor)</li> </ul>
<b>Sprint's Global One</b>	<ul style="list-style-type: none"> <li>France (France Telecom)</li> <li>Germany (Deutsche Telekom)</li> </ul>			
<b>Cable &amp; Wireless</b>	<ul style="list-style-type: none"> <li>Belgium</li> <li>Bulgaria (MOBIKOM)</li> <li>France (Bouygues Telecom)</li> <li>Ireland</li> <li>Italy</li> <li>Latvia (Lattelekom)</li> <li>Portugal (Eastechnica)</li> <li>Russia (Nakhodka Telecom, PLD, SakhalinSviaz, Sakhalin Telecom, ST Mobile)</li> <li>Spain</li> <li>Switzerland</li> <li>U.K. (Flexible Resource, One 2 One, Petersburg Long Distance)</li> </ul>	<ul style="list-style-type: none"> <li>Anguilla</li> <li>Antigua &amp; Barbuda</li> <li>Ascension Islands</li> <li>Barbados (Barbados Communication Services, Barbados External Telecom, Barbados Tel., Digital Information Sys.)</li> <li>Bermuda</li> <li>British Virgin Islands</li> <li>Cayman Islands</li> <li>Dominica</li> <li>Falkland Islands</li> <li>Grenada (Grentel)</li> <li>Jamaica (Jamaica Digiport International)</li> <li>Montserrat</li> <li>Panama</li> <li>St. Helena</li> <li>St. Kitts and Nevis (SKANTEL)</li> <li>St. Lucia</li> <li>St. Vincent &amp; the Grenadines</li> <li>Trinidad &amp; Tobago (TSTT)</li> <li>Turks &amp; Caicos</li> </ul>	<ul style="list-style-type: none"> <li>Australia (Optus)</li> <li>China</li> <li>Fiji (Fintel)</li> <li>Hong Kong (Asia Satellite Telecom, Hong Kong Telecom)</li> <li>India</li> <li>Indonesia (PT Daya Mitra Malindo)</li> <li>Japan (IDC)</li> <li>Korea</li> <li>Macau (CTM)</li> <li>Pakistan (Paktel)</li> <li>Philippines (ETPI, Oceanic Wireless Network)</li> <li>Singapore (Mobile One)</li> <li>Solomon Islands (Solomon Islands Telekom)</li> <li>Taiwan</li> <li>Thailand (Compunet)</li> <li>Tonga</li> <li>Vanuatu (Telecom Vanuatu)</li> <li>Vietnam</li> </ul>	<ul style="list-style-type: none"> <li>Bahrain (Batelco)</li> <li>Diego Garcia</li> <li>Lebanon</li> <li>Maldives (DHIRAAG)</li> <li>South Africa (M-TEL MTN)</li> <li>Seychelles</li> <li>Yemen (Teleyemen)</li> </ul>
<b>Unisource</b>	<ul style="list-style-type: none"> <li>Netherlands (PTT Telecom)</li> <li>Sweden (Telia)</li> <li>Switzerland (Swiss PTT)</li> </ul>			

\*Markets targeted by SBC/Ameritech Business Plan.

Sources: *SBC/Ameritech*: SBC Investor Briefing, May 11, 1998; SBC/Ameritech Business Plan; SBC 1997 Annual Report; SBC, *About SBC: International Operations*, at <http://www.sbc.co>About/International.html>; Ameritech internal information. *WorldPartners*: WorldPartners Press Release, *First African Carrier Joins WorldPartners Association*, May 8, 1998. *MCI/WorldCom*: WorldCom Press Release, *Telefónica Partners with WorldCom and MCI*, Mar. 9, 1998; International Telecommunication Union, *World Telecommunication Development Report*, 1996/1997, at Table 3.4 (1997); WorldCom Press Release, *Combined Company Fact Sheet*, [www.wcom.com/press/111097\\_2.html](http://www.wcom.com/press/111097_2.html). *Global One*: Global One, *Key Facts About Global One*, at <http://www.global-one.net/en/press/facts.html>. *Cable & Wireless*: Cable & Wireless, *Businesses by Region*, at <http://www.cwplc.com/business/nonjava.htm>. *Unisource*: Unisource Press Release, *Unisource and Telefonica Agree Terms for Termination*, Dec. 15, 1997.

**Table 17. National Commitment to Provide Competitive Local Service**

Company	Number of SBC's 30 Out-of-Region MSAs Served	Number of SBC's Top 20 In-Region MSAs Served	Comments
SBC/Ameritech	30	20	<ul style="list-style-type: none"> <li>Will provide business and residential service to 30 out-of-region markets, all of which are in the top 55 Metropolitan Statistical Areas (MSA).</li> <li>Plans to begin offering business service in 1999 and residential service in 2000.</li> </ul>
AT&T/TCG/TCI	22	14	<ul style="list-style-type: none"> <li>Operates networks within 40 different MSAs.</li> <li>AT&amp;T has abandoned the provision of nationwide local service although acquisition of TCI may alter these plans.</li> <li>TCI provides local service in California, Connecticut and Illinois<sup>1</sup>.</li> </ul>
MCI/WorldCom	23	19	<ul style="list-style-type: none"> <li>WorldCom, MCI, MFS and Brooks Fiber combined operate networks in 60 different MSAs.</li> <li>WorldCom has 12 more networks planned or under construction.</li> <li>WorldCom plans to operate as a local wholesaler of business service</li> <li>MCI has scaled back its plans to enter local markets</li> </ul>
Sprint	0	0	<ul style="list-style-type: none"> <li>Sprint recently announced the launch of its Integrated On-Demand Network (ION). An initial roll out to large businesses will begin later this year. The service will be generally available to businesses in mid-1999, with consumer availability late in 1999.</li> <li>Sprint will build its own broadband networks in 36 major markets in 1998 and 24 additional markets in 1999. These networks will allow Sprint ION to pass 70 percent of all large businesses nationwide. To serve small business and residential customers who may not have access to these networks, Sprint will lease broadband facilities, such as DSL, from other carriers.<sup>2</sup></li> </ul>
Bell Atlantic	0	0	<ul style="list-style-type: none"> <li>Bell Atlantic does not offer out-of-region local service.</li> </ul>
GTE	0	1	<ul style="list-style-type: none"> <li>In March 1997, GTE announced that it would begin offering Internet service in 60 markets outside of its region.<sup>3</sup></li> <li>GTE intends to become a "leading national provider of telecommunications service," offering a bundle of local, long distance, Internet, and wireless services over an advanced data network</li> <li>GTE has CLEC approval in 9 states.<sup>4</sup></li> </ul>
BellSouth	1	0	<ul style="list-style-type: none"> <li>BellSouth competes with Sprint in Orlando, FL, and the company has been approved to provide local service to an out-of-region section of Florida and in Indiana.</li> <li>BellSouth, through its subsidiary BellSouth BSE, is seeking approval to become a CLEC in eight states.</li> </ul>
U S West	0	0	<ul style="list-style-type: none"> <li>U S West has approval to offer local service in 36 states and plans to begin offering service this year.<sup>5</sup></li> </ul>
Time Warner	6	5	<ul style="list-style-type: none"> <li>Time Warner offers CLEC service to business customers in 19 cities.</li> </ul>
Other CLECs	No CLEC serves more than 7	No CLEC serves more than 11	<ul style="list-style-type: none"> <li>Market reach varies among the top independent CLECs, although none serve more than 17 of the top 55 MSAs.</li> <li>Intermedia serves just 10 MSAs, none of which are in the top 10. Intermedia's networks are scattered across cities in the southeastern United States, and the company resells local service in cities along the east coast.</li> <li>ICG serves 19 MSAs, 3 of which are in the top 10. The company prides itself on its regional network "clusters" and calls itself "a leading regional CLEC."<sup>6</sup></li> <li>McLeodUSA's networks are currently in 9 of the 14 Midwest and Rocky Mountain states it plans to enter.</li> <li>GST serves the western United States including Hawaii and parts of Arizona, California, Idaho, New Mexico, Texas, and Washington.</li> <li>WinStar serves business customers in 12 of the top 15 MSAs through broadband wireless circuits on the 38 GHz frequency.</li> <li>espire operates 32 networks in 28 MSAs. The company's strategy has been "to focus on second-tier southern cities, leaving the big cities to AT&amp;T Corp., MCI Communications Corp and other giant competitors."<sup>7</sup></li> <li>Hyperion serves mostly cities in the East and South.</li> </ul>
Other Cable Providers			<ul style="list-style-type: none"> <li>Most cable operators have abandoned cable telephony to offer high-speed Internet access instead.</li> <li>Cablevision offers telephony in Long Island, NY and Connecticut.</li> <li>Cox Communications offers telephony in Orange County, CA; Omaha, NE; and Phoenix, AZ</li> <li>MediaOne, which broke its direct ties to US West in June 1998<sup>8</sup>, introduced its local service Atlanta, GA earlier this year and in Los Angeles just recently.<sup>9</sup></li> </ul>

<sup>1</sup>L. Hall, *MediaOne Takes on Its Ex-Parent: US West Battle in Minn.*, Electronic Media, May 25, 1998, at 4. <sup>2</sup>Sprint Press Release, *Sprint Unveils Revolutionary Network*, June 2, 1998. <sup>3</sup>S. Masur, *GTE Pushes Dial-Up Internet Service*, Computer Reseller News, March 17, 1997. <sup>4</sup>M. Rockwell, *Big Telcos Start Turf Wars - GTE and Bell Companies Invade Each Other's Territories*, InternetWeek, Nov. 3, 1997, at T1. <sup>5</sup>US WEST Press Release, *US West 'Poised and Ready' To Offer Long Distance: Federal Court Ruling Will Accelerate U S WEST Market Entry*, Jan. 2, 1998. <sup>6</sup>ICG Communications, *Corporate Info*, at <http://www.icgcomm.com/telecom/corpinfo/AboutUs.htm>, 1998. <sup>7</sup>M. Mills, *Esquire Rings Up Sales Against the Bells*, Washington Post, May 25, 1998 at F05. <sup>8</sup>MediaOne Press Release, *MediaOne Group Becomes Independent Company*, June 12, 1998. <sup>9</sup>MediaOne Press Release, *MediaOne Begins Deployment of Telephone Service to Single-Family Homes*, Jan. 27, 1998.

**Table 18. National Commitment to Provide Competitive Residential Local Service**

Company	Residential Commitment
SBC/Ameritech	<ul style="list-style-type: none"> <li>Plans to provide residential service to 30 major out-of-region markets by 2003.</li> </ul>
AT&T/TCG/TCI	<ul style="list-style-type: none"> <li>The partnership between AT&amp;T and TCG is "primarily focused on the business market."<sup>1</sup></li> <li>Recently announced plans to first target local service for big business, then small-to-medium sized businesses, then multiple-dwelling units; has expanded local call access for business in four states.<sup>2</sup> Its acquisition of TCI may make AT&amp;T a more viable residential competitor but it is not yet clear what services the new company will offer.</li> </ul>
MCI/WorldCom	<ul style="list-style-type: none"> <li>Although MCI maintains its existing residential service, it now "is focusing its efforts mainly on downtown, high-end customers."<sup>3</sup></li> <li>"WorldCom's stated strategy is to become a premier provider of the full array of communications services to business, government, and eventually residential end-users."<sup>4</sup></li> </ul>
Sprint	<ul style="list-style-type: none"> <li>Sprint plans to offer bundled voice and data service via resale to residents by late-1999, but "the primary residential users will be those who already spend heavily on communications."<sup>5</sup></li> </ul>
Bell Atlantic	<ul style="list-style-type: none"> <li>Plans center on providing competitive service to independent territory in in-region states</li> </ul>
GTE	<ul style="list-style-type: none"> <li>"GTE says it will first aim for small businesses with one to 50 employees and 'high-end' residential customers..."<sup>6</sup></li> </ul>
BellSouth	<ul style="list-style-type: none"> <li>Does not offer out-of-region residential wireline service (competes with GTE in-region).</li> </ul>
U S West	<ul style="list-style-type: none"> <li>U S West is splitting from its MediaOne affiliate, which provides residential service in Atlanta and Los Angeles.</li> <li>U S West still has CLEC approval in 27 states.</li> </ul>
Time Warner	<ul style="list-style-type: none"> <li>"Even though Time Warner pegged itself as a company that would bring competition to the residential telephone market locally, it announced plans in 1996 to indefinitely postpone such ambitions."<sup>7</sup></li> </ul>
Other CLECs	<ul style="list-style-type: none"> <li>Most CLECs focus on business customers' data and voice needs.</li> <li>"To date, the facilities-based model created by the early competitive local exchange carriers (CLECs) has primarily targeted business customers."<sup>8</sup></li> <li>"Intermedia's customers include a broad range of business and government end users and IXCs."<sup>9</sup></li> <li>"Neither NEXTLINK nor ICG is targeting the local residential market..."<sup>10</sup></li> <li>Some cable-based and smaller CLECs are targeting high-end business customers.</li> <li>"Cedar Rapids, Iowa-based McLeodUSA also is going after small business, but it is one of the very few companies to pursue residential business as well;"<sup>11</sup> McLeod traditionally has "been focused on business users."<sup>12</sup></li> <li>"[e.spire]... [is] one of the few companies that has been competing with BellSouth in Georgia for residential customers using local service;"<sup>13</sup> nevertheless, "[t]he company's focus will be the business market, not residential customers..."<sup>14</sup></li> </ul>

<sup>1</sup>Z. Schiller, *TCG Begins Phone Service For Cleveland Business Customers*, The Plain Dealer, Jan. 13, 1998, at 10C (quoting AT&T Chairman C. Michael Armstrong). <sup>2</sup>J. Keller, *AT&T Network Allows Access to Local Calls*, Wall Street Journal, June 9, 1998, at B25. <sup>3</sup>M. Rockwell, *Local Services Competition Isn't Hitting Home - AT&T's Acquisition of Teleport Reinforces Shift Towards Corporate Customers*, Internet Week, Feb. 2, 1998, at T13. <sup>4</sup>New Paradigm Resources Group and Connecticut Research, *The 1998 CLEC Report: Annual Report on Local Telecommunications Competition*, at MFS-WorldCom - 2 (1998) ("Connecticut Research") (emphasis added). <sup>5</sup>E. Glanton, *Sprint Plans Landmark Upgrade*, Yahoo! News, Jun. 2, 1998. <sup>6</sup>J. Bounds, *GTE Prepares to Invade Local Access Service Turf*, Dallas Business Journal, Oct. 17, 1997, at 24 ("We think that across America, in this category, these customers are underserved," said Rick Crain, vice president of product development and marketing). <sup>7</sup>R. Sekhri, *Time Warner Network May Carry Digital TV, Internet Local Upgrade Unlikely to Include Phone Service*, Cincinnati Business Courier, Mar. 20, 1998, at 6. <sup>8</sup>M. Rockwell, *Local Services Competition Isn't Hitting Home - AT&T's Acquisition of Teleport Reinforces Shift Towards Corporate Customers*, Internet Week, Feb. 2, 1998, at T13. <sup>9</sup>Connecticut Research at Intermedia - 2. <sup>10</sup>J. Clary, *Fresh Face May Help BellSouth Dial Long Distance*, Nashville Business Journal, Apr. 14, 1997, at 1. <sup>11</sup>A. Scmitt, *Calling All Companies Local Phone Companies are Ready to Woo Customers in Business Arena*, Chicago Daily Herald, Feb. 5, 1998, at 1. <sup>12</sup>E. Mooney, *McLeod Plans Notes Sale to Fund Network Bailout*, Radio Comm. Report, July 21, 1997, at 41. <sup>13</sup>M. Kanneil, *Today's Topic: Technology*, Atlanta Constitution, Jan. 14, 1998, at 02B. <sup>14</sup>S. Schafer, *Phone Provider Means Business*, Tulsa World, June 12, 1997, at E1.

**Table 19. Facilities to Provide Competitive Local Service**

Company	Networks (Planned)	Switches (Planned)	Route <sup>2</sup> Miles (Planned)	Comments
SBC/Ameritech	(30)	(63)	(3,000)	
AT&T/TCG/TCI	66 (8)	596	9,474	<ul style="list-style-type: none"> <li>TCG's networks are concentrated in downtown business areas and sometimes extend to outlying business districts.</li> <li>AT&amp;T has minimal local networks, but it has equipped its 4E switches to provide Digital Link local service.</li> <li>TCI is currently testing digital telephony over its HFC in West Hartford, CT and Arlington Heights, IL. Its viability as a local provider is dependent upon the development of Internet Telephony.</li> </ul>
MCI/WorldCom	176 (12)	280	11,261	<ul style="list-style-type: none"> <li>The networks of Brooks Fiber, MFS, MCI and WorldCom overlap in 29 cities.</li> </ul>
Sprint	(60)			<ul style="list-style-type: none"> <li>Sprint will build its own broadband networks in 36 major markets in 1998 and 24 additional markets in 1999. These networks will allow Sprint ION to pass 70 percent of all large businesses nationwide. To serve small business and residential customers who may not have access to these networks, Sprint will lease broadband facilities, such as DSL, from other carriers.<sup>3</sup></li> </ul>
Bell Atlantic	0 (0)	0	0	<ul style="list-style-type: none"> <li>Bell Atlantic has no public plans to offer competitive facilities-based local service out-of-region.</li> </ul>
GTE	2 (0)	22	0	<ul style="list-style-type: none"> <li>GTE operates as a CLEC only in those areas where it already has extensive ILEC networks.</li> </ul>
BellSouth	0 (0)	1	0	<ul style="list-style-type: none"> <li>BellSouth BSE, a BellSouth subsidiary established for out-of-region local services, will initially resell local exchange services to business customers.</li> </ul>
U S West	0 (0)	0	0	<ul style="list-style-type: none"> <li>U S West has no public plans to offer competitive facilities-based local service.</li> </ul>
Time Warner	17 (2)	22	5,321 (299)	
Intermedia	10 (0)	47	762	<ul style="list-style-type: none"> <li>"Instead of building costly fiber-optic networks...Intermedia focuses on switching technology."<sup>4</sup></li> </ul>
ICG	19 (0)	51	3,021 (1,117)	<ul style="list-style-type: none"> <li>ICG is partnering with utility companies to expand its networks and services. ICG's networks are deployed primarily in Western states.</li> </ul>
McLeod	8 (3)	3	4,900 (2,000) <sup>5</sup>	<ul style="list-style-type: none"> <li>McLeod has announced plans to complete 36 additional fiber rings and 2,000 more route miles in 1998.<sup>6</sup></li> </ul>
GST	36 (12)	36	5,107	
WinStar	24 (6) <sup>7</sup>	47	n/a	<ul style="list-style-type: none"> <li>WinStar's network consists of broadband wireless circuits on the 38 GHz frequency.</li> </ul>
ELI	5 (4)	10	2,087	<ul style="list-style-type: none"> <li>ELI's networks are only in the western part of the United States.</li> </ul>
e.spire	32 (1)	42	1,061	<ul style="list-style-type: none"> <li>"[e.spire] has built an intercity broadband ATM network that allows the company to provide a wide variety of voice and data communications services at a reduced cost."<sup>8</sup></li> </ul>
Hyperion	18 (3)	29	4,326	
NEXTLINK	15 (5)	32	1,897 (237)	
MGC Communications	3 (15) <sup>9</sup>	50	n/a	<ul style="list-style-type: none"> <li>MGC plans to build facilities in 18 markets by the end of 1999.<sup>10</sup></li> </ul>
Teligent	(30) <sup>11</sup>	26	n/a	<ul style="list-style-type: none"> <li>Teligent plans to provide wireless broadband services at 24 GHz.<sup>12</sup></li> </ul>

<sup>1</sup>All switch figures are taken from the Bellcore LERG (July 1998) database. The LERG is based on information that is provided to Bellcore by incumbent and competitive local carriers. LERG switch counts do not always agree with counts from other sources, including public statements by the carriers themselves. Some of these discrepancies are due to the blurring of definitional lines between switching entities and rate centers. The bright line that once distinguished central office switches from other switching equipment has been fading as a new generation of remote switches and remote digital terminals (RDTs) have emerged with limited switching capabilities. Data shown here include all switches designated as "local" and as "CLEC" or "CAP" in the LERG. <sup>2</sup>All figures from New Paradigm Resources Group and Connecticut Research, *The 1998 CLEC Report: Annual Report on Local Telecommunications Competition*, 9th ed. (1998) ("Connecticut Research"), unless otherwise noted. <sup>3</sup>Sprint Press Release, *Sprint Unveils Revolutionary Network*, June 2, 1998. <sup>4</sup>R. Krause, *Switches Light Telecom Firm's Path*, Investor's Business Daily, Apr. 15, 1998 at A9. <sup>5</sup>McLeod Press Release, *McLeod/USA Reports Continued Growth and Margin Improvement for First Quarter 1998*, Apr. 29, 1998. <sup>6</sup>*Id.* <sup>7</sup>WinStar Press Release, *WinStar Adds 7 New CLEC Markets*, May 7, 1998. <sup>8</sup>Connecticut Research, at ACSI - 2. <sup>9</sup>MGC Communications, *Furman Setz Issues "Strong Buy" Recommendation on MGC*, June 30, 1998, at <http://www.mgcom.com/index-3news.html>. <sup>10</sup>*Id.* <sup>11</sup>Teligent Inc., at <http://www.teligentinc.com/home.htm>. <sup>12</sup>*Id.*

**Table 20. Open Entry Policies**

Country	Local	Long Distance	International	Cellular	Cable
<b>United States</b>	1996	1978 ( <u>Execunet</u> )	1982	Analog: duopoly Digital: open	1992: end of exclusive franchise 1996: telcos permitted
<b>Canada</b> <i>Bell Canada privatized 1987</i>	1994 1997: cable telephony	1992	U.S./Canada route open Oct. 1998: open (other traffic)	Analog: duopoly Digital: duopoly	1995 1998: telcos permitted
<b>Japan</b> <i>NTT privatized 1985</i>	1988	1987	1987	Analog: open Digital: open	1993
<b>United Kingdom</b> <i>BT privatized 1984 (partial) to 1997 (full)</i>	1991 1992: cable telephony	1984: duopoly 1996: open	1984: duopoly 1994: resale only 1996: open	Analog: open Digital: open	1980s
<b>Germany</b> <i>DT privatized 1996</i>	1998	1998	1998	Analog: monopoly Digital: open	Pre-1995
<b>France</b> <i>FT privatized 1997</i>	1998	1998: open	1998: open	Analog: duopoly Digital: open	Pre-1988
<b>Italy</b> <i>Telecom Italia privatized 1997</i>	1998	1998	1998	Analog: open Digital: duopoly	1996 <sup>c</sup>
<b>Spain</b> <i>Telefonica de Espana privatized 1992 (partial) to 1997 (full)</i>	Dec. 1998	Dec. 1998	Dec. 1998	Analog: monopoly Digital: duopoly	1995 <sup>c</sup>
<b>Mexico</b> <i>Telmex privatized 1990</i>	monopoly	1996	1996	Analog: duopoly	Pre-1988 <sup>c</sup>
<b>Australia</b> <i>Telstra privatized 1991</i>	1997	1991: duopoly 1997: open	1992	Analog: monopoly Digital: duopoly	1992
<b>New Zealand</b> <i>TCNZ privatized 1990</i>	1987	1989	1989	Analog: open Digital: open	1989
<b>Other Privatizations</b>	Argentina: <i>Telecom Argentina</i> (1990), Barbados: <i>Barbados External Telecom</i> (1991), Belize: <i>Belize Telecom</i> (1988), Bolivia: <i>ENTEL</i> (1995), Cape Verde: <i>Cabo Verde Telecom</i> (1995), Chile: <i>ENTEL</i> (1987), Czech Republic: <i>SPT Telecom</i> (1994), Denmark: <i>TeleDanmark</i> (1994), Estonia: <i>Eesti Telfon</i> (1993), Ghana: <i>Ghana Telecom</i> (1996), Gibraltar: <i>NYNEX Communications</i> (1989), Greece: <i>OTE</i> (1996), Guinea: <i>SOTELGUI</i> (1996), Guinea-Bissau: <i>Guine Telecom</i> (1989), Guyana: <i>Guyana Telecom. Corp.</i> (1991), Hungary: <i>MATAV</i> (1993), Indonesia: <i>PT Indosat</i> (1994), <i>PT Telkom</i> (1995), Ireland: <i>Telecom Eireann</i> (1996), Israel: <i>Bezeq</i> (1990, 1991), Jamaica: <i>TOJ</i> (1989, 1990), Korea: <i>Korea Telecom</i> (1993, 1994, 1996), Latvia: <i>Lattellkom</i> (1994), Malaysia: <i>Telekom Malaysia</i> (1990, 1993), Mongolia: <i>Mongolian Telecom. Co.</i> (1995), Netherlands: <i>KPN</i> (1994), Pakistan: <i>Pak-Telecom</i> (1994), Peru: <i>Telefonica de Peru</i> (1994, 1996), Portugal: <i>Portugal Telecom</i> (1995, 1996, 1997) (partial), Puerto Rico: <i>Telefonica Larga Distancia</i> (1992), Sao Tome: <i>CST</i> (1989), Singapore: <i>Singapore Telecom</i> (1993, 1996), Venezuela: <i>CANTV</i> (1991, 1996).				
<b>WTO Agreement</b>	On February 15, 1997, 69 countries signed the WTO agreement to open their markets for all basic telecommunications services to competition from foreign-owned companies. Each participating country committed to varying foreign ownership restrictions and to a different schedule of implementation based on its current level of liberalization and infrastructure. Signatories of the WTO, in addition to those profiled in this table, include: Argentina, Chile, Hungary, Iceland, India, Indonesia, Israel, Korea, Malaysia, Norway, Pakistan, Peru, Philippines, Poland, Singapore, South Africa, Sri Lanka, Switzerland, Thailand, Turkey, and Venezuela.				

<sup>c</sup>: estimate